

What is claimed is:

1. An isolated polypeptide selected from the group consisting of:

- (i) an isolated polypeptide comprising a polypeptide sequence selected from the group having at least 95% identity to the polypeptide sequence of SEQ ID NO:2;
- (ii) an isolated polypeptide comprising the polypeptide sequence of SEQ ID NO:2; or
- (iii) an isolated polypeptide which is the polypeptide sequence of SEQ ID NO:2.

2. An isolated polynucleotide selected from the group consisting of:

- (i) an isolated polynucleotide comprising a polynucleotide sequence encoding a polypeptide sequence that has at least 95% identity to the polypeptide of SEQ ID NO:2;
- (ii) an isolated polynucleotide comprising a polynucleotide sequence which has at least 95% identity to that of SEQ ID NO: 1;
- (iii) an isolated polynucleotide comprising a polynucleotide sequence encoding the polypeptide of SEQ ID NO:2;
- (iv) an isolated polynucleotide encoding the polypeptide of SEQ ID NO:2;
- (v) an isolated polynucleotide which is the polynucleotide of SEQ ID NO: 1;
- (vi) an isolated polynucleotide obtainable by screening a library under stringent hybridization conditions with a labeled probe having the sequence of SEQ ID NO: 1 or a fragment thereof;
- (vii) a polynucleotide which is the RNA equivalent of a polynucleotide of (i) to (vi); or
- or a polynucleotide sequence complementary to said isolated polynucleotide.

3. An antibody immunospecific for the polypeptide of claim 1.

4. A process for diagnosing a disease or a susceptibility to a disease in a subject related to expression or activity of the polypeptide of claim 1 in a subject comprising:

- (a) determining the presence or absence of a mutation in the nucleotide sequence encoding said polypeptide in the genome of said subject; and/or
- (b) analyzing for the presence or amount of said polypeptide expression in a sample derived from said subject.

5. A method for screening compounds to identify those which stimulate or which inhibit the function of the polypeptide of claim 1 which comprises a method selected from the group consisting of:

- 5 (a) measuring the binding of a candidate compound to the polypeptide (or to the cells or membranes expressing the polypeptide) or a fusion protein thereof by means of a label directly or indirectly associated with the candidate compound;
- (b) measuring the binding of a candidate compound to the polypeptide (or to the cells or membranes expressing the polypeptide) or a fusion protein thereof in the presence of a labeled competitor;
- 10 (c) testing whether the candidate compound results in a signal generated by activation or inhibition of the polypeptide, using detection systems appropriate to the cells or cell membranes expressing the polypeptide;
- (d) mixing a candidate compound with a solution containing a polypeptide of claim 1, to form a mixture, measuring activity of the polypeptide in the mixture, and comparing the activity of the mixture to a standard; or
- 15 (e) detecting the effect of a candidate compound on the production of mRNA encoding said polypeptide and said polypeptide in cells, using for instance, an ELISA assay.

6. An expression vector comprising a polynucleotide capable of producing a polypeptide of claim 1 when said expression vector is present in a compatible host cell.

20 7. A process for producing a recombinant host cell comprising the step of introducing the expression vector of claim 6 into a cell such that the host cell, under appropriate culture conditions, produces said polypeptide.

25 3. A recombinant host cell produced by the process of claim 7.

9. A membrane of a recombinant host cell of claim 8 expressing said polypeptide.

30 10. A process for producing a polypeptide comprising culturing a host cell of claim 8 under conditions sufficient for the production of said polypeptide and recovering the polypeptide from the culture.

11. An isolated polynucleotide selected from the group consisting of

- (a) an isolated polynucleotide comprising a nucleotide sequence which has at least 95% identity to SEQ ID NO:3 over the entire length of SEQ ID NO:3;

- (b) an isolated polynucleotide comprising the polynucleotide of SEQ ID NO:3;
(c) the polynucleotide of SEQ ID NO:3; or
(d) an isolated polynucleotide comprising a nucleotide sequence encoding a polypeptide which has at least 95% identity to the amino acid sequence of SEQ ID NO:4, over the entire length of SEQ ID NO:4.

12. A polypeptide selected from the group consisting of
(a) a polypeptide which comprises an amino acid sequence which has at least 95% identity to that of SEQ ID NO:4 over the entire length of SEQ ID NO:4;
10 (b) a polypeptide in which the amino acid sequence has at least 95% identity to the amino acid sequence of SEQ ID NO:4 over the entire length of SEQ ID NO:4;
(c) a polypeptide which comprises the amino acid of SEQ ID NO:4;
(d) a polypeptide which is the polypeptide of SEQ ID NO:4; or
(e) a polypeptide which is encoded by a polynucleotide comprising the sequence contained in
15 SEQ ID NO:3.

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